

CHEM 3110 Laboratory Syllabus (CRN 22929)
Department of Chemistry
Georgia State University
Spring 2018 - MMII

Instructor: Dr. Nilmi Fernando

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Pre-Lab: TR 12:00 – 12:50 PM in 218 NSC

Laboratory: TR 12:50 – 4:45 PM in 246 NSC

Office Hours: W 10:00 AM – 12:00 PM in 434D Kell Hall

Required Texts: 1) CHEM 3110 Lab Manual (available day 1 of lab)

2) Experimental Organic Chemistry by Wilcox and Wilcox

Optional Texts: Introduction to Spectroscopy by Pavia, Lapman, Kriz

Grading

*Final Exam	100 pts
*Final Formal Report	100 pts
Preparation, attendance quizzes and *, **notebook	<u>100 pts</u> 300 pts - Maximum

*Must be submitted to receive a passing grade. **Notebooks will not be returned.

Tentative Cutoffs:

A+	96%	B	80%	C-	66%
A	90%	B-	77%	etc.	
A-	87%	C+	74%		
B+	84%	C	70%		

Important Notes

1. Attendance to pre-lab lecture and lab will be recorded. Absences might result in loss of points and a lower grade (sign-in/sign-out required). Every effort should be made to arrive on time. Students are responsible for timely completion of all assignments regardless of absence.
2. No make-up quizzes or the final exam. Missed quizzes or the final exam will be counted as zero.
3. Bound composition notebooks are required starting the first day of lab. All entries MUST be made in ink at the time of experiment. Instructor's signature is required on all experiments. Notebooks are checked every lab day. Missing notebooks WILL result in loss of points. Only one lab notebook must be maintained.

- Students must bring safety glasses or goggles and dress in lab appropriate attire including closed shoes starting first day of lab. Students will start synthesis on the first day immediately after check-in.
- Failure to follow safety procedures will result in expulsion from that lab session with no make-up labs.

Department of Chemistry Policy Statement Regarding Student Integrity

The Department of Chemistry follows the University policy on academic honesty published in the "Faculty Affairs Handbook" and the "On Campus: The undergraduate Co-Curricular Affairs Handbook". Any suspected offenses may be referred to the Department Chair for appropriate action.

All tests taken must represent your individual, unaided efforts. To receive or offer information during an examination is considered cheating. The use of unauthorized supplementary material during tests is also cheating. Only original data obtained by your own laboratory experimentation are permitted to be used, except when specifically authorized by your laboratory instructor. Data from supplementary sources (handbooks, reference literature, etc.) must be clearly referenced (title, author, volume, page(s), etc.) Falsification or destruction of data constitutes cheating. All final reports must be original and written by the student (no copying).

Date & Lab	Tentative Pre-Lab Emphasis	pp. Wilcox & Wilcox
Feb. 27 th (lab 1)	Safety video, course objectives, check-in, safety quiz Synthesis of Chalcones	3-24
Mar. 1 st (lab 2)	Recrystallization of Chalcone, purity (m.p.), yield, literature search Quiz 1	84-102 Lab Manual
Mar. 6 th (lab 3)	Overview of synthetic routes (Epoxide and/or Dibromide preparation) Quiz 2	84-102 Lab Manual
Mar. 8 th (lab 4)	Overview continued; structure proof (Epoxide and/or dibromide preparation) Quiz 3	234-253 (IR)
Mar. 20 th (lab 5)	Structure proof continued (Isoxazole preparation) Quiz 4	263-288 (NMR)
Mar. 22 nd (lab 6)	UV spectroscopy Complete preparations and purifications Quiz 5	254-262
Mar. 23rd	Last Day to Withdraw without a 'W'	
Mar. 27 th (lab 7)	UV spectroscopy continued Begin Optional procedures Quiz 6	
Mar. 29 th (lab 8)	Optional procedures continued Quiz 7	
Apr. 3 rd (lab 9)	¹³ C NMR	263-288

	Synthesis of optional compounds continued Quiz 8	
Apr. 5 th (lab 10)	¹³ C NMR continued Synthesis of optional compounds continued Quiz 9	
Apr. 10 th (lab11)	Format of Final Exam Last day to begin a new synthesis Quiz 10	
Apr. 12 th (lab12)	Format of Final Report Miscellaneous topics Complete additional procedures and lab work	7-8 lab manual Clean-up; check-out
Apr.17th. (lab13)	Final Exam 12:00 – 2:00 PM 218 NSC Final Report and Notebook must be submitted (due at 12:00 PM)	